



# CITY OF LODI COUNCIL COMMUNICATION

**AGENDA TITLE:** Public hearing to consider adopting resolution to amend the Electric Utility Department Rules and Regulations No. 15 to assess a Transmission & Substation System Charge on new developments outside existing City limits as of August 1, 2006 (EUD)

**MEETING DATE:** February 7, 2007

**PREPARED BY:** Electric Utility Director

**RECOMMENDED ACTION:** Adopt a resolution amending the Electric Utility Department (EUD) Rules and Regulations No. 15 to establish a new Transmission and Substation System Charge and assess this fee on new developments outside City boundaries as they exist on August 1, 2006.

**BACKGROUND INFORMATION:** During an earlier public hearing on September 20, 2006, a representative from the Building Industry Association (BIA) requested additional time to further review the proposed Substation & Transmission System Charge and was granted this time by the City Council. EUD has provided relevant background on this matter to the BIA. From September 20, 2006, to the present, three meetings were scheduled with the BIA.

Presently, the cost of constructing new transmission lines and substation facilities is provided by EUD without any cost contributions by new developers. EUD's existing four (4) distribution substations have sufficient capacity for existing and in-fill development within the city. In the short run, new developments outside existing city boundaries can also be served from existing substations. In the longer run, however, new substations may be required in the west/southwest and/or south/southwest areas of the community to reliably accommodate expanded growth beyond current city boundaries.

Based on typical EUD substation and transmission facilities design, the estimated cost of constructing a new substation and its associated transmission system is \$7,864,500 (in 2006 dollars). The corresponding cost per kVA (kilovolt-amperes) is \$163.84, which is calculated using the 48MVA (megavolt-amperes) effective capacity of the EUD's standard substation.

Staff recommends the establishment of a Substation and Transmission System Charge to be assessed upon future EUD electric load outside City boundaries as they exist on August 1, 2006. The initial amount of such charge would be \$163.84 per kVA of computed new electrical load. This charge would be adjusted annually beginning January 1, 2008 based on changes in the Producer Price Index for Electric Power Distribution. [For a typical 200 amp residence (5kVA), the one-time charge would be \$819.20.]

A separate account shall be established under the EUD's Capital Improvement Project (CIP) Fund for the collected fees. This separate fund shall be expended only for the construction of new substation and transmission lines and shall not be commingled with other capital accounts. The proposed amendment to EUD's Rules and Regulations No. 15 (Extension of Facilities) is shown in Attachment A.

**FISCAL IMPACT:** This action will provide funds for future capital expenditures associated with new substation/transmission facilities.

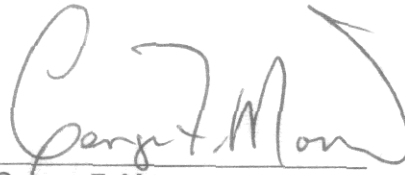
**FUNDING AVAILABLE:** Not applicable.

APPROVED:   
Blair King, City Manager

**Public hearing to consider adopting resolution to amend the Electric Utility Department Rules and Regulations No. 15 to assess a Transmission & Substation System Charge on new developments outside existing City limits as of August 1, 2006 (EUD)**

February 7, 2007

Page 2 of 2

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George F. Morrow  
Electric Utility Director

**PREPARED BY:** Demy Bucaneg, Jr., P.E.

GFM/DB/1st  
Attachments  
cc: City Attorney

RESOLUTION NO. 2007-22

A RESOLUTION OF THE LODI CITY COUNCIL AMENDING THE ELECTRIC  
UTILITY DEPARTMENT RULES AND REGULATIONS NO. 15, ESTABLISHING  
A NEW TRANSMISSION AND SUBSTATION SYSTEM CHARGE ON NEW  
DEVELOPMENTS OUTSIDE EXISTING CITY LIMITS AS OF AUGUST 1, 2006

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WHEREAS, presently the cost of constructing new transmission lines and substation facilities for the distribution system is provided by the Electric Utility Department (EUD) without any cost contributions by new developers; and

WHEREAS, presently, EUD's existing four distribution substations have sufficient capacity for existing and in-fill development within the city; and

WHEREAS, in the short-term, new developments outside existing city boundaries can also be served from existing substations, and in the long-term, new substations may be required in the west/southwest and/or south/southwest areas of the community to reliably accommodate expanded growth beyond current city boundaries; and

WHEREAS, based on typical EUD substation and transmission facilities design, the estimated cost of constructing a new substation and its associated transmission system is \$7,864,500 (in 2006 dollars). The corresponding cost per kVA (kilovolt-amperes) is \$163.84, which is calculated using the 48MVA (megavolt-amperes) effective capacity of EUD's standard substation; and

WHEREAS, staff recommends the establishment of a Substation and Transmission System Charge to be assessed as a development impact fee upon future EUD electric load outside City boundaries as they exist on August 1, 2006. The initial amount of such charge would be \$163.84 per kVA of computed new electrical load. This charge would be adjusted annually beginning January 1, 2008, based on changes in the Producer Price Index for Electric Power Distribution; and

WHEREAS, a separate account shall be established under EUD's Capital Improvement Project Funds for the collected fees and funds shall be expended only for the construction of new transmission and substation lines and shall not be commingled with other capital facilities accounts. The proposed amendment to EUD's Rules and Regulations No. 15 (Extension of Facilities) is shown in Attachment A.

NOW, THEREFORE, BE IT RESOLVED that the Lodi City Council hereby amends Electric Utility Department's Rules and Regulations No. 15, establishing a new Transmission and Substation System Charge and approves assessment of this fee on new developments outside City boundaries as they exist on August 1, 2006; and

BE IT FURTHER RESOLVED that this Resolution shall take effect on April 9, 2007.

Dated: February 7, 2007

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I hereby certify that Resolution No. 2007-22 was passed and adopted by the City Council of the City of Lodi in a regular meeting held February 7, 2007, by the following vote:

AYES: COUNCIL MEMBERS – Hansen, Hitchcock, Katzakian, Mounce, and  
Mayor Johnson

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None

  
RANDI JOHL  
City Clerk



# **CITY OF LODI**

## **ELECTRIC UTILITY DEPARTMENT**

### AMENDMENT TO RULE AND REGULATION NO. 15

#### (EXTENSION OF FACILITIES)

**Existing Section D.3 of Rule and Regulation No. 15 is amended by the addition of a new Subsection "c" to read as follows:**

**D. Line Extensions**

**3. City's Responsibility:**

- c. Furnish and construct transmission line (60kV) and distribution substation facilities to accommodate new development within the service area. The projected costs of such facilities shall be shared proportionately based on the electrical capacity requirements of new electric load, as determined by EUD. These projected costs shall include labor, materials, equipment and infrastructure to construct necessary transmission line and distribution substation facilities.

A "Transmission & Substation System Charge" shall be assessed to new developments and/or electric load outside City boundaries as such boundaries exist on August 1, 2006. The amount of this charge (\$163.84 per kVA of computed new electrical load) shall be documented in the Schedule of Charges attached to EUD's Rules and Regulations.

The amount of the Transmission & Substation System Charge shall be revised annually beginning January 1, 2008 based on the change in the U.S. Department of Labor's Bureau of Labor Statistics' Producer Price Index (PPI) for Electric Power Distribution between the PPI for the month of June of the prior two calendar years. If there is a change in this charge between the time of application for electric service and the actual payment of charges, the charge in effect at the time of payment shall apply.



***Please immediately confirm receipt  
of this fax by calling 333-6702***

CITY OF LODI  
P. O. BOX 3006  
LODI, CALIFORNIA 95241-1910

**ADVERTISING INSTRUCTIONS**

**SUBJECT:** implementation of a new Substation & Transmission System Charge to be assessed as a development impact fee upon future electric utility customers outside existing City boundaries and making corresponding amendments to the applicable Electric Utility Department Rules and Regulations (EUD)

**LEGAL AD**

**PUBLISH DATE:** Saturday January 6, 2007

**TEAR SHEETS WANTED:** Three (3) please

**SEND AFFIDAVIT AND BILL TO:** RANDI JOHL, CITY CLERK  
City of Lodi  
P.O. Box 3006  
Lodi, CA 95241-1910

**DATED:** Thursday January 3, 2007

**ORDERED BY:**

RANDI JOHL  
CITY CLERK

JENNIFER M. PERRIN, CMC  
DEPUTY CITY CLERK

DANA R. CHAPMAN  
ADMINISTRATIVE CLERK

**Verify Appearance of this Legal in the Newspaper – Copy to File**

LNS	Faxed to the Sentinel at 369-1084 at <u>430pm</u> (time) on <u>1/4/07</u> (date)	<u>2</u> (pages)
	Phoned to confirm receipt of all pages at <u>430p</u> (time)	<u>JMP</u> <u>DR</u> (initials)



## **DECLARATION OF POSTING**

**implementation of a new Substation & Transmission System Charge to be assessed as a development impact fee upon future electric utility customers outside existing City boundaries and making corresponding amendments to the applicable Electric Utility Department Rules and Regulations (EUD)**

On Friday, January 5, 2007, in the City of Lodi, San Joaquin County, California, an implementation of a new Substation & Transmission System Charge to be assessed as a development impact fee upon future electric utility customers outside existing City boundaries and making corresponding amendments to the applicable Electric Utility Department Rules and Regulations (EUD), was posted at the following locations:

Lodi Public Library  
Lodi City Clerk's Office  
Lodi City Hall Lobby  
Lodi Carnegie Forum

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January 5, 2007, at Lodi, California.

ORDERED BY:

**RANDI JOHL  
CITY CLERK**

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JENNIFER M. PERRIN, CMC  
DEPUTY CITY CLERK

A handwritten signature in dark ink, appearing to read "Dana R. Chapman", is written over a horizontal line.

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DANA R. CHAPMAN  
ADMINISTRATIVE CLERK



## CITY OF LODI

Carnegie Forum  
305 West Pine Street, Lodi

## NOTICE OF PUBLIC HEARING

Date: February 7, 2007

Time: 7:00 p.m.

For information regarding this notice please contact:

**Randi Johl**

**City Clerk**

**Telephone: (209) 333-6702**

### NOTICE OF PUBLIC HEARING

**NOTICE IS HEREBY GIVEN** that on **Wednesday, February 7, 2007** at the hour of 7:00 p.m., or as soon thereafter as the matter may be heard, the City Council will conduct a public hearing at the Carnegie Forum, 305 West Pine Street, Lodi, to consider the following matter:

- a) implementation of a new Substation & Transmission System Charge to be assessed as a development impact fee upon future electric utility customers outside existing City boundaries and making corresponding amendments to the applicable Electric Utility Department Rules and Regulations (EUD)

Information regarding this item may be obtained in the Electric Utility Department, 1331 S. Ham Lane, Lodi, (209) 333-6762. All interested persons are invited to present their views and comments on this matter. Written statements may be filed with the City Clerk, City Hall, 221 W. Pine Street, 2<sup>nd</sup> Floor, Lodi, 95240 at any time prior to the hearing scheduled herein, and oral statements may be made at said hearing.

If you challenge the subject matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the City Clerk, 221 West Pine Street, at or prior to the close of the public hearing.

By Order of the Lodi City Council:

A handwritten signature in black ink, appearing to be "Randi Johl", written over a circular notepad-like background.

Randi Johl  
City Clerk

**Dated:** January 3, 2007

Approved as to form:

A handwritten signature in black ink, appearing to be "D. Stephen Schwabauer", written in a cursive style.

D. Stephen Schwabauer  
City Attorney



# **Electric Utility Department**

## **Public Hearing**

# **Transmission & Substation System Charge**

**February 7, 2007**





# Substation Fee Survey

- **Ludlow, VT** – all cost of required substation/transmission
- **Mountain View Electric Association, CO** – all cost of required substation & transmission
- **Fort Collins, CO** – Electric Capacity Fee
- **Longmont, CO** – Electric Community Investment Fee
- **Burbank, CA** – Off-site Facilities Fee
- **SMUD, CA** – 1 MW or larger, all costs
- **PG&E** – all cost of required substation/transmission (Woodland, CA)

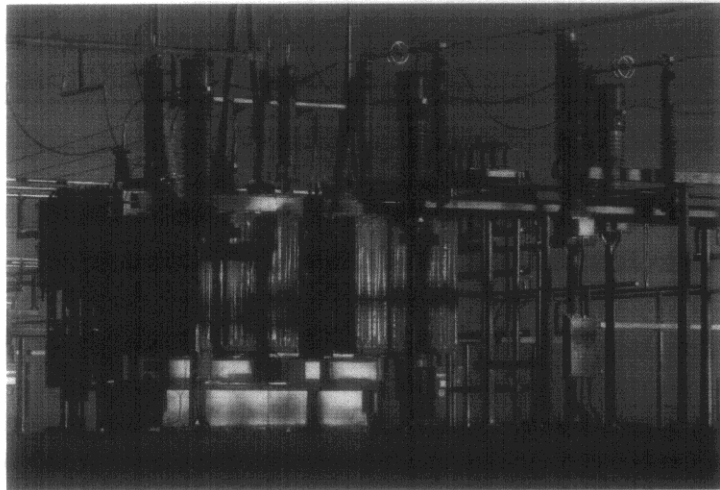
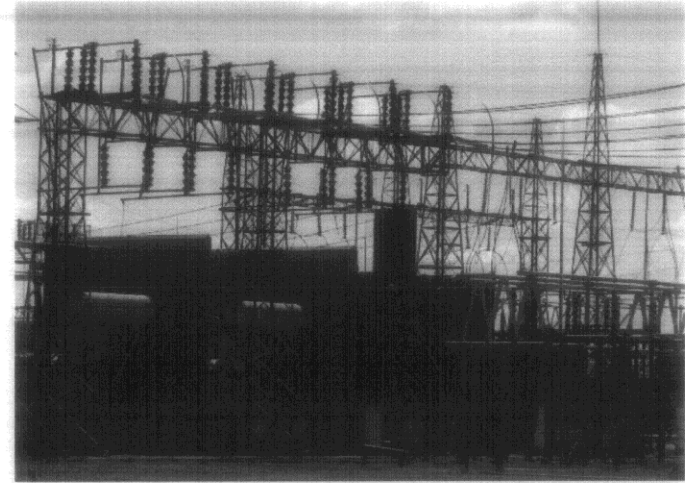
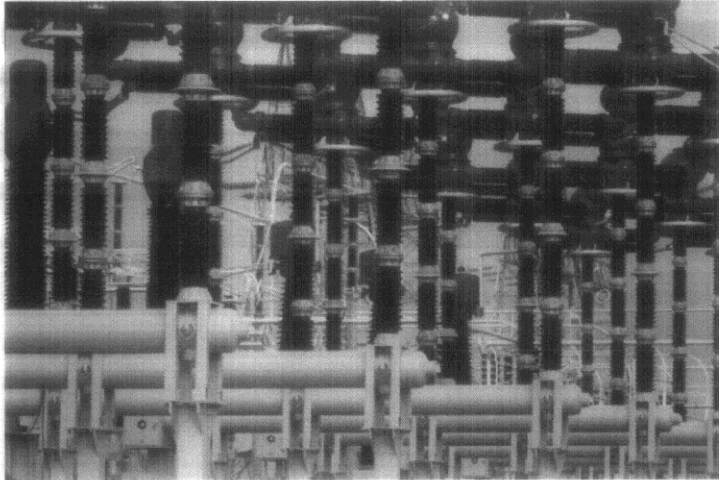


# Background

- Many electric utilities have moved to full cost recovery models for new load
- A major cost element of electric system expansion relates to new substations and associated transmission
- Presently, EUD's four existing substations have sufficient capacity for existing and in-fill growth
- In short run, new development/load outside present City limits can be served
- In the longer run (5 to 15 years), new substations in southwest and/or south/southeast may be necessary

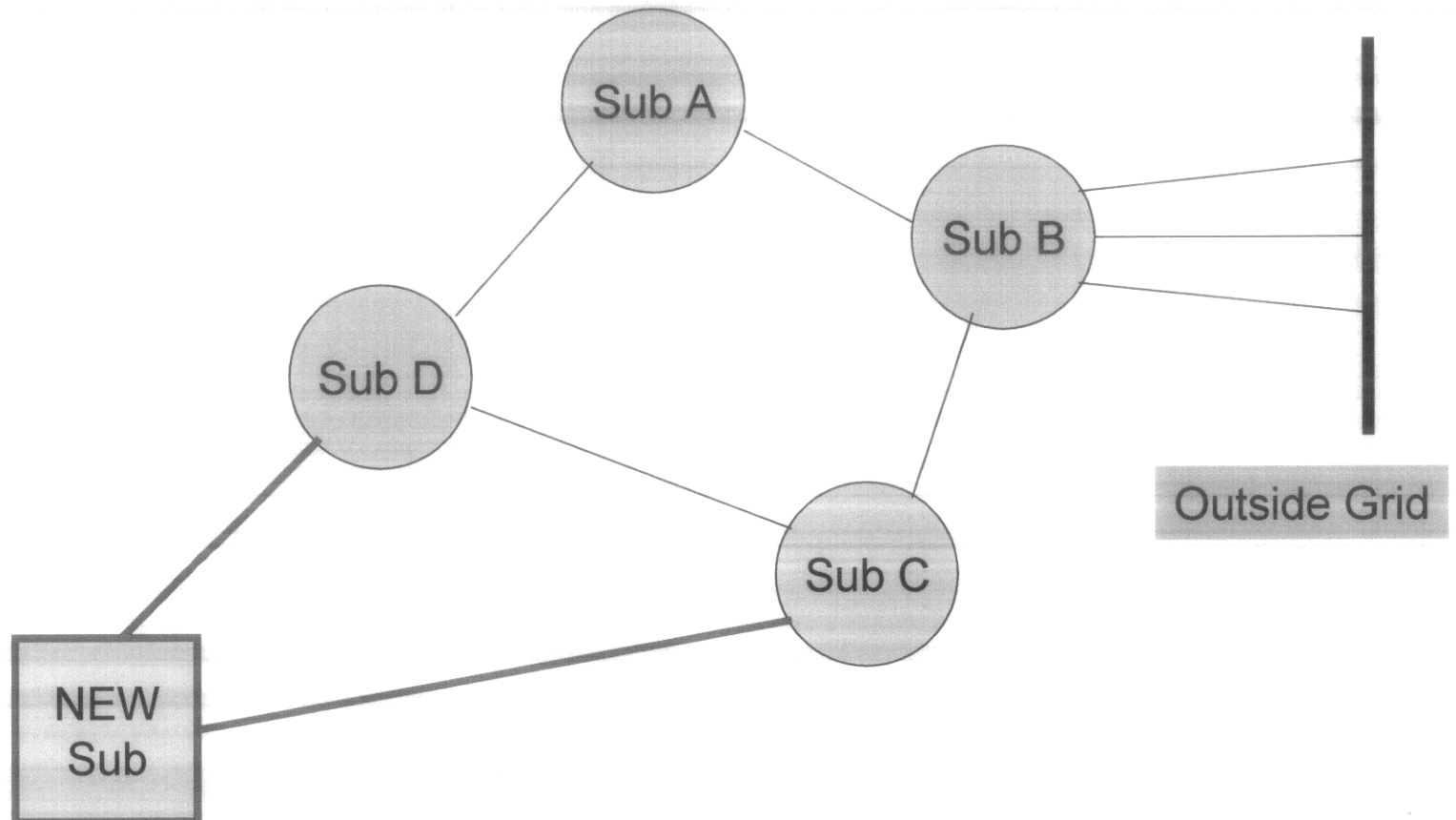


# Substations





# Electric Systems





# Recommendation

- EUD recommends adoption of a “Substation & Transmission System Charge”
- Would apply to new electric development/load outside City boundaries as they exist on 8/1/06
- These fees would be set aside in a separate account only for stated purposes
- Initial rate of \$163.84 per kilovolt ampere (kVA) of connected load
- Charge to be updated annually based on Producer Price Index (Electric Distribution Facilities)
- Proposed to be effective in 60 days



# Customer Impact

- **Fee payment amount varies based on connected electric load**
- **Typical new home is 5 kVA, resulting in a one-time charge of about \$819**
- **At the upper end, a 1000 kVA manufacturing plant would be charged about \$164,000**

**A new substation (with transmission) would cost ~\$7.8 million.**

# Calculation

## I. 60kV to 12kV Distribution Substation:

	Effective Capacity =	48.00	MVA
	No. of Distribution Feeders =	8	Circuits
	No. of Power Transformers =	2	Units
	Substation Lot Size =	40,000	sq ft
	Distribution Substation Cost =	\$ 7,444,500	

## II. 60kV Transmission Line:

	Typical Line Length to the Substation =	5.00	miles
	60kV Transmission Cost =	\$ 420,000	

## III. Typical Distribution Substation Facility Cost:

	Total (Substation + Transmission) Cost =	\$ 7,864,500	
	<b>Cost per kVA =</b>	<b>\$ 163.84</b>	2006\$



# Questions/Comments

